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# THE SECOND-HOME RECREATION MARKET IN THE NORTHEAST



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# THE SECOND-HOME RECREATION MARKET IN THE NORTHEAST

A Problem Analysis of Economic,  
Social, and Environmental Impacts

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## INTRODUCTION

One of the most significant challenges facing recreation resource planners and managers throughout the Northeastern United States is to maintain natural beauty of outdoor recreation environments and related ecosystems, while at the same time meeting demands for various types of outdoor recreation activities. An important aspect of recreation demand, and one that consumes significant parcels of attractive natural landscapes, is the second-home recreation market.

In 1968, 3 percent of all householders in the United States—1.7 million of them—owned a second home (U.S. Dept. of Commerce 1969). In 1971, at least 95,000 new second homes were constructed. This compares with an average of 20,000 per year in the 1940s and 75,000 per year in the 1960s. Second-home starts were expected to rise to 150,000 per year in the 1970s (Reilly 1973).

The Northeastern United States includes one-quarter of the nation's second homes (Ragatz 1974), and one-quarter of its people, but only 10 percent of its land area. The New Jersey coast, the Poconos, the Adirondacks, Cape Cod, the White Mountains, the Green Mountains, the Maine coast, and many state and private holdings form a continuum of prime recreation land that has provided the topographical amenities, pleasant scenery, and water that attract second-home buyers. New Hampshire alone has 287,000 second-home residents, a number equal to one-third of the total permanent population of the State (Soucie 1973).

The explosive growth in second-home construction has great impacts on rural areas. Some are beneficial; but others cause economic, social, or environmental problems. Many of these problems can be solved by action of citizens based on policies adopted by government at local, state, or national levels. The solution to other problems requires information that can be gained by research. In either case, solutions must be sought that allow recreational needs to be met without causing unacceptable

damage to the rural landscape or to the economy or social system of rural residents.

## Objectives

The objectives of this problem analysis are:

1. To review and document the economic, social, and environmental impacts of the second-home recreation market in the Northeast.
2. To suggest policy issues and responses for dealing with problems associated with second-home development.
3. To outline a program of research to provide new approaches to solving these problems.

## "Second Home" Defined

Second homes are defined as homes other than the primary place of residence, which families or individuals reserve for seasonal or occasional use (U.S. Department of Commerce 1969). Such places are either owned by a family or individual or are rented for a period of not less than a year. This definition places no restrictions on the quality of the structure. The second home may be anything from a small cottage with no plumbing, heating, or sanitary facilities to an elegant home suitable for year-round occupancy. Condominiums are included; but trailers, houseboats, and commercially operated motels and guest homes are not.

Ragatz (1969) used the term vacation house; Satterthwaite (1969) used the term leisure home; others have used the term recreation home (Ragatz 1969). We prefer the term *second-home* for two reasons. First, the underlying motives for buying a second home are not always based on recreational or leisure time objectives. Second homes are often bought for their investment potential, as a future retirement home, or as a status symbol (Ragatz 1969). Such motives are not likely to be viewed as recreation- or leisure-oriented.

Secondly, vacation home, leisure home, and recreation home all suggest transient occupancy. This is a characteristic of most second homes, but there is a tendency for second

homes to become permanent residences (Clawson 1972). A second home may provide a perfect retirement home; it may serve as a studio for an artist or writer who markets his output in the city; or it may provide a solution for the businessman who travels frequently and prefers a rural life for his family. The rising popularity of condominiums and the construction of more year-round (heated and insulated) second homes suggests that the conversion process is speeding up.

Whether second homes are actually used for recreation, leisure, or vacationing is less important than their impact on economic, social, and natural environments. Their construction is part of the process of urbanization; and their purchase results in all of the financial, legal, and social responsibilities of property ownership.

### **Historical Development of Second Homes**

#### *Older Resort Areas*

Second homes for vacation use have been built by the wealthy since Colonial times, and sizable vacation communities developed in the 1800s. The Adirondacks in New York became famous as a vacation spot of the Vanderbilts, Morgans, Harrimans, and Rockefellers (Crossette and Oehser 1973). Areas on the Atlantic shore, such as Cape Cod and Atlantic City, experienced the beginnings of tourism and second-home construction in the early 1900s. This was caused by the growing popularity of swimming and sunbathing (deGrazia 1970) and the increasing availability of public transportation. By the 1920s, automobiles had come into general use, the work week had shortened, and incomes had risen. Many more Americans were able to escape the crowded cities on weekends, and the more affluent travelled to second homes within a short distance of metropolitan areas.

#### *Speculative Developments of the Fifties and Sixties*

The years after World War II witnessed the mass merchandising of a new commodity: recreation land (Ragatz 1974). Developers exploited the tremendous demand for land that

was suitable for recreation, retirement, or speculation. In California and Florida, developers had discovered that they could sell land by mail. High-pressure sales tactics, and a failure to provide promised roads, sewage systems, and amenities were typical of most subdivisions. One result was low buildout rates. Nationally by 1971, only 1 of 6 recreational lots sold had been built on. In Florida this ratio was an astonishing 1 of 73,268 (Reilly 1973).

#### *Improved Subdivisions of the Sixties*

In the early 1960s many developers started marketing land in improved subdivisions. Roads, recreation amenities, and some housing were constructed before lots were actually sold. Marketing was directed at those interested in building second homes for recreation rather than at people interested primarily in speculation. Careful planning and sound management by some developers led to many successful housing developments. But elsewhere development of second homes has resulted in soil erosion, water pollution, visual blight, and unhappiness for landowners.

#### *Second-Home Communities*

A recent development in second homes has been the second-home community. This class of development is becoming popular throughout the Nation, resulting in part from stronger state environmental controls. These controls tend to favor the larger corporations, which have the planning expertise, public relations personnel, and capital necessary to undertake large-scale projects that conform to environmental legislation. Characteristics of second-home community developments are described as follows:

While developers are still making most of their money off land sales, their time frame is greatly extended (5 to 20 years) and their plans call for extensive development, often including the construction of housing. The market is predominantly a user market of home buyers, rather than lot buyers. The land planning is the most sophisticated in the industry. These de-

velopments are high amenity projects with developed recreational facilities, such as golf courses, marinas, ski slopes. . . . Standards are often high. . . . These projects exhibit the greatest likelihood of financial successes in terms of establishing a lasting and viable community of real worth (Ragatz 1974:30).

The second-home community concept has gained in popularity in the Northeast. Particularly active in this market are the owners of large ski areas, many of whom have become land developers. They offer a variety of recreational amenities and services to home buyers. Ski corporations such as Waterville Valley, Mittersill, Killington, Sugarbush, Bretton Woods, and Mt. Snow attract visitors from all over the Northeast; and they sell second homes in the higher price ranges of the market, from \$20,000 to \$30,000. Ski-area developments are usually advertised as four-season communities, offering skiing in winter and golf, swimming, fishing, tennis, hiking, and other activities during the rest of the year. Year-round use is maximized by the developers' usual practice of helping the owner rent his property during periods when he is not in residence.

#### *A Trend Toward Condominiums*

Concurrent with the growth of second-home communities has been an increase in the construction of condominiums. This form of ownership offers financial and design advantages for buyers, builders, and developers. Because they are not buying land, buyers are able to purchase housing features and conveniences that they otherwise couldn't afford. Also, they are relieved of maintenance worries. Modular designs have eliminated many construction woes for builders. These developers have been able to meet environmental standards that they might not have been able to meet with typical detached housing. Many complexes are constructed by developers who remain associated with the property as managers and rental agents. In these complexes, owners usually agree not to occupy their units for more than a specified number of days per year. The units

are rented the rest of the year, providing income to the owner and to the developer.

#### *Future Trends*

Economies of scale favor larger developers, who are likely to continue the trend toward second-home communities and condominiums. Single-unit second-home construction will continue, but at a decreasing rate as land prices, material costs, and the popularity of second-home communities continues.

Furthermore, as the cost of acquiring a second home increases, new concepts aimed at keeping more people in the market are likely to emerge. Ragatz (1974) indicates that multiple ownerships, rental pools, and campground clubs are already affecting the second-home market.

#### **Characteristics of Owners**

Who buys a second home? The following excerpt from the 1970 Census of Housing provides an answer.

Of the Nation's 63.4 million households in 1970, 2.9 million or 5 percent owned a second home. Almost 2.2 million or three-fourths of the second-home owners owned their primary residence, while 700,000 rented their primary unit.

Households containing husband-wife families . . . were much more likely to own second homes (75 percent compared to 69 percent for all households). A greater share of second home husband-and-wife families had a head in the 45 to 64 age bracket than did all of these families (52 percent compared with 38 percent).

About 13 percent of second-home owners were one-person households compared with 18 percent of all households. The percentage of households with a head 65 years of age or over was the same in second-home households and in all households, about 20 percent. The tendency to own a second home showed a direct relationship with income. For families and primary individuals with less than \$2,000 income, only 3 percent owned a second



home. In the income range of \$7,000 to \$10,000 about 4 percent owned a second home, while in the highest income group, \$50,000 or more, nearly one-fifth owned a second home. Median income of families and primary individuals owning a second home was \$11,400, compared with \$8,400 for all households. Second-home owners with incomes of \$15,000 or more were 17 percent of all households but constituted one-third of all second homes (U.S. Department of Commerce 1973a).

In other words, second-home owners tend to be married, affluent, and middle-aged.

A study in northern New England (USDI Bureau of Outdoor Recreation 1967) revealed similar owner characteristics. The only sharp difference occurred in the percentage of second-home owners whose permanent residences were in other states, 63 percent for northern New England compared to only 33 percent nationally. This difference is in part attributable to the proximity of northern New England to major population centers in Connecticut, Massachusetts, New York, and Rhode Island.

Several other studies in the Northeast revealed consistency in second-home owner characteristics (Bevins 1972; Nieswand and others 1973; Tobey 1972). They also showed that most owners choose a second home for home-site qualities, the presence of water and scenic beauty being most important. Most owners perceive a correlation between environmental quality and property value, and many would be willing to pay higher taxes to maintain or improve environmental quality.

### IMPACTS OF SECOND-HOME DEVELOPMENTS

The impacts of second-home developments may be viewed as changes in the economic, social, or environmental systems of communities, states, or regions. Impacts may be beneficial, or they may be adverse. One purpose of this problem analysis is to identify adverse impacts so that research or policy changes can be suggested to deal with them.

Three classes of impacts are defined:

1. Economic—benefits or costs measurable in

monetary units, such as changes in land values, tax revenues, or costs of public services.

2. Social—changes in life styles of individuals or communities; effects on mobility, employment, housing, public health, availability of public services; changes in attitudes and goals; political changes; esthetic changes.
3. Environmental—effects on natural and biological resources, such as soil erosion, water pollution, disruption of successional processes.

These classes are not mutually exclusive, and they are defined for convenience in identifying and describing effects of second-home construction. A given project may have all three types of effect.

Impacts of similar types of second homes will vary by community, state, and region; and they will be different for mountain, lake, and seashore developments. Thus impacts can be identified most easily on the basis of case studies, with generalizations drawn from a number of cases.

### Economic Impacts

The economic impact of second-home developments has been the subject of considerable research during the past 10 years. Availability of data and a tendency for people to voice their loudest concern over economic issues have contributed to this emphasis. Several case studies are summarized below. Many of them are from Vermont, whose recreation and second-home industries have attracted considerable research.

#### *Lakeside Recreation Developments*

A study was made of a 1,500-lot recreational subdivision at Lake Redstone, Wisconsin (Richey 1972). Local land assessments and property tax collections rose 30-fold from 1964 to 1967 after construction of an artificial lake. Tax collections were projected to rise another 300 percent after housing construction. The author believed that future cost impacts on local government would be low, but he did not document this conclusion.

In a study done for the Outdoor Recreation Resources Review Commission in Oklahoma and Arkansas, the effect of reservoir-stimulated growth on local governments was examined (Moore 1962). Though substantial gains in tax base were identified, the balance of gain or loss was difficult to evaluate because of problems of financing increased road mileage, and because assessments lagged behind increases in market value.

In an analysis of a Pennsylvania lakeshore development (Brown 1970), the financial effects of subdividing 1,300 acres into a 1,600-lot second-home development were estimated. The first \$7 million in development outlay was estimated to generate \$14 million in economic activity, 40 percent of which would accrue to local businesses. The development resulted in an increase of \$50,000 in tax revenues for two townships in 1967. Local tax revenues of \$140,000 were predicted for 1970.

In this analysis, not as careful attention was given to the cost side of development as to the benefit side. As part of a homeowner survey, estimates were obtained of increased school enrollments expected from development residents, but these were not converted into cost impacts. The study's conclusion was that net impacts on the local school system and other public services would probably be small.

#### *Recreation Expenditures in New Hampshire*

In New Hampshire census data were used to estimate the number of second homes in the State (Hendrick 1971). Nearly 34,000 summer homes and 12,500 year-round dwellings used as second homes were identified. The number of year-round dwellings used as second homes grew by almost 11 percent per year from 1960 to 1970.

Foster and Dahlfred (1973) examined the net effect of recreational expenditures on the economy of New Hampshire. They found total outlays of \$221 million attributable to recreation in 1967. Thirty percent of this was related to second homes as follows:

	<i>Million dollars</i>
Owner's local expenditures	9.5
Operation, maintenance, and taxes	36.8
New construction	17.7
	<hr/> 63.8

Total expenditures due to recreation amounted to 9.6 percent of the gross State product, two-thirds of which was spending by out-of-staters. Second homes contributed about 3 percent to gross State product.

#### *The 1968 Vermont Survey*

In 1968 there were 22,548 second homes in Vermont, of which 58 percent were owned by out-of-state residents (Vermont Agency for Development and Community Affairs 1968). More than half of the out-of-state owners lived in New York, Connecticut, and Massachusetts. In northwestern Vermont, 36 percent of the units in Grande Isle County were owned by Canadians.

Second homes had a total assessed valuation of \$82 million, and their owners paid \$4.3 million in property taxes in 1968. This was over 7 percent of all property tax collections that year. Average property tax paid by non-resident owners was \$217, compared to \$150 paid by Vermont residents. Six Vermont towns (out of 238) received 50 percent or more of their property tax revenue from second homes. Sixteen towns received over 30 percent of their revenues from non-Vermont residents.

Total economic impacts on the Vermont economy from second homes, not including construction outlays, were estimated at about \$39 million per year.

#### *The 1973 Vermont Resurvey*

Changes in the Vermont second-home situation since 1968 were identified in a resurvey in 1973 (Vermont Agency of Environmental Conservation 1974). Major statewide trends were as follows:

	1968	1973	Percent change
Second homes (number)	22,600	29,000	31
Second-home taxes raised (\$ million)	4.3	9.5	121
Average tax per unit (dollars)	191	322	69

These years witnessed rapid growth of the skiing industry, partly attributable to the completion of interstate highways to northern Vermont.

Second homes in Vermont are not evenly distributed: one-fifth of the towns contain 51 percent of the units. Most of the major second-home towns are near lakes or ski areas, and it was in these towns that most of the growth occurred. A few towns actually lost second homes from 1968 to 1973, by conversion of homes to full-time residence, by demolition, or by some other cause.

Taxes on second homes grew faster than total tax collections. Second homes contributed 9.3 percent of Vermont property taxes in 1973, compared to 7 percent in 1968. About three-quarters of second-home taxes were paid by nonresidents.

#### *Bevins' Vermont Study*

Bevins (1974) studied 52 Vermont towns in which 30 percent or more of the fair market value of real estate was in seasonal properties. He found that from 1967 to 1971 the fair market value of seasonally occupied properties rose by 114 percent. Of the 52 study towns, 13 had economies oriented toward winter recreation. Only two of these towns had tax levels higher than the average of all study towns. Bevins concluded: "There appears to be little question that vacation properties contribute more to the local treasury than the service cost they impose on that community"—apparently due to the low demand for schools from owners of vacation properties.

#### *The Ludlow Study*

The town of Ludlow in central Vermont is affected by second-home development generated by the Okemo Mountain ski area. In 1970, Ludlow had a permanent population of 2,600—900 owner-occupied and rental housing units, and 600 second homes (Johnson 1973). At least 300 additional second-home units were known to be in the planning stages. The town's service population (all those who use town services, including transients) was estimated at 5,000 persons.

Between 1968 and 1973, the assessed valuation of second homes increased from 19 percent to 34 percent of the town's total tax base. The town's expenditures for general government, police, and fire protection were found inadequate to meet current needs, despite the increase in the tax base and in taxes collected.

School expenditures rose threefold in the 10 years ending in 1972. During this period, costs per pupil doubled, total enrollment rose slightly, and transportation costs rose. Johnson (1973:58) concluded:

Second-home development has no adverse financial effect on the local school system over the immediate future. Indeed, second-home development has the effect of substantially increasing the tax base without any corresponding increase in the pupil roll of the school system.

Over a longer term, the effect might be different. Conversion of 45 percent of second homes into year-round residences in 10 years would add 900 additional students (a 150 percent increase); conversion of 25 percent would double the student population in 10 years. The latter increase would raise the operating budget by 25 percent, to \$800,000, and would require capital improvements of \$1 million.

Summarizing the impact of second homes, Johnson (1973:1) concluded:

Not only are current costs and benefits being deferred to the future, but, more significantly, second-home development has grown to the point where it is actually shaping Ludlow's future. For example,



the vast majority of land is used for recreation and second-home development. The non-resident population is beginning to outnumber the resident population.

Johnson identified the future rate of conversion of second homes into residences as the most important variable determining the fiscal effect of growth on the town's government sector. He also pointed to the disadvantages of high out-of-state landownership, high real estate prices, and narrow specialization of the town economy.

### *The Stowe Study*

During the winter of 1974, we studied the impact of second homes and ski recreation on the economy and public finances of Stowe, Vermont. Stowe is the home of the Mount Mansfield ski area and the Trapp Family Lodge and has long been popular for skiing and summer vacations. But the completion of an interstate highway to northern Vermont in the late 1960s led to a boom in second-home construction.

Second homes are an important part of the Stowe housing stock, comprising one-third of the units. Most of the growth in second homes has taken place since 1967. Their number has increased from 161 to 470 in just 5 years.

Seventy percent of the growth since 1967 was in condominium units. Condominiums have higher average values and are less likely to become permanent residences than detached housing. Because condominiums are concentrated in complexes, their land-use and public service impact is low.

Second-home units are a major source of tax income to the town. In 1973, "camps and vacation property" were 25 percent of the town's real property tax base.

Ski recreation and second homes bring millions of dollars into the Stowe economy annually. The Mt. Mansfield Company alone pays about 7 percent of the town's total tax bill. Ski recreation is the basis for most of the high valuation placed on property in the rest of the town.

Economic growth since 1960, together with higher assessment ratios, has raised assessed valuation faster than the tax bill, so that tax rates have declined markedly. Thus second-home construction has so far provided net economic benefits to the town.

### *Summary of Economic Impacts*

From the above studies it is clear that second homes have substantial economic effects on local communities. On the benefit side, they generate income during construction and through owner expenditures for locally purchased goods and services. They increase the tax base of local governments in two ways: (1) directly, as their assessed value is determined by local assessors, and (2) indirectly, by inducing increases in the price of surrounding land.

On the cost side, second homes increase the demand for public services such as roads, sewers, and schools. Whether effective tax rates are raised or lowered depends on whether the local taxes paid by second-home owners fall short of or exceed these cost increases.

At the state level, second homes contribute to gross state product, income, employment, and sales taxes. These effects are particularly important where second-home owners come from out of state.

From a national viewpoint, many of the economic effects of second-home development are simply transfers from one state or region to another. But construction, maintenance, and travel expenditures generate national net economic benefits.

### **Social Impacts**

The social consequences of second-home development have received relatively little research attention, perhaps because social change resulting from second-home development is likely to vary widely among communities. The complexity of measuring change in social systems and the intangible nature of social values are other reasons for a relative lack of information. Research on social impacts is most easily done on a case-study basis, but results

may be of limited value outside a particular study area.

Three case studies in Vermont focused on social impacts of second-home developments.

#### *The Middlebury College Survey*

Supported by the New England Board of Higher Education, two students from Middlebury College conducted a survey of second homes and homeowners in eight central Vermont towns (Frazer and Donovan 1972). Sample towns ranged from lakefront communities to farming areas to towns dominated by ski recreation.

The number of second homes in 1972 ranged from 67 in Monkton to 389 in Warren. For the whole sample, second homes increased by 33 percent from 831 in 1965 to 1,102 in 1972. Warren led at 85 percent, while Moretown increased only 2 percent. In Warren, 93 percent of the vacation homes were owned by non-Vermonters. For all eight towns, the average was 62 percent out-of-state ownership. When asked about their future plans for residence in Vermont, 29 percent of the second-home owners responded that they definitely planned to move to Vermont; 18 percent said they might.

The authors noted high summer occupancy in most areas, with summer and winter peaks in the ski areas. They also observed a trend toward rental of second homes, especially in ski areas.

#### *The Wilmington and Dover Study*

In 1972, the firm of Wallace, McHarg, Roberts, and Todd completed a planning study for Wilmington and Dover, Vermont, the towns influenced by the Mt. Snow ski area and its associated development. As part of the plan, projections were presented of population, households, and second homes based on a range of assumptions and on the area already platted for subdivision.

The firm found that 2,000 acres had been sold or developed since 1967, and about 1,500 acres of additional subdivisions had been platted but not yet sold. It was estimated that an additional 7,500 to 10,000 acres were being held for development within 10 years.

In 1970, Dover and Wilmington contained 641 resident households; by 1980 this could grow to 840 to 920 households, corresponding to a population of 2,800 to 3,100 persons. The number of dwelling units would rise from 1,419 in 1970 to between 10,500 and 13,200 in 1980. The second-home stock would rise from 950 in 1970 to between 9,800 and 12,500 units. While these rates of growth may seem unrealistic from a 1974 perspective, they were intended to illustrate the magnitude of development pressures facing the towns and the potential for destruction of their high environmental quality.

#### *The Warren Study*

The town of Warren, in central Vermont, is located near three major ski areas: Glen Ellen, Mad River Glen, and Sugarbush Valley. Social effects on Warren of second-home and ski development were studied by the Vermont Public Interest Research Group in 1972. An examination of poll-tax lists and assessed valuation, plus interviews with employers and residents, revealed that Warren businesses provided 85 full-time year-round jobs. But 88 percent of these were held by persons who had moved to Warren after development began about 1965. Between 1968 and 1972 the number of vacation homes increased by 60 percent to 400 homes, 84 percent of which were owned by out-of-state residents. Interviews with 50 out-of-state vacation homeowners revealed that 30 percent had definite plans to establish permanent residence in Warren.

Landownership patterns also changed drastically as a result of development. By 1972, 57 percent of the landowners were out-of-staters, and they owned 39 percent of the private land in the town.

The authors concluded that the town of Warren had been infiltrated and expropriated from its original residents, and they implied that this had ruined the town.

#### *Urban to Rural Migration*

While the Nation has become increasingly urbanized because of a net migration from rural to urban areas, a reverse seasonal flow of people has developed. Traditionally, urban



dwellers who have sufficient resources have migrated seasonally to rural areas for sight-seeing, recreation, and vacationing. Their spending has contributed significantly to the economy of rural areas. Urban tourists demand various goods and services from the areas that they visit, but their relationship to rural communities is transitory. The second-home owner, however, is a seasonal resident of the community. While in residence, he demands many of the same services and facilities as the permanent residents, and he may express great concern about community politics, laws, policies, and attitudes.

Second-home owners represent a substantial percentage of rural populations on a seasonal basis. In the Northeast, rural areas in Maine and New Hampshire are particularly subject to seasonal population fluctuations. There, nearly one-third of the total seasonal population of rural areas consists of second-home residents (table 1 on pg. 27).

Table 1 shows the average ratio of second-home residents to total seasonal population of rural areas for each state. Because not all communities have second-home developments, this ratio must be far higher in others that do. Although not all second homes are occupied at any one time, periods of peak seasonal use bring a wave of temporary residents to many rural communities.

The social impact of such population dynamics is uncertain. One possible effect is greater communication between rural and urban people, resulting in a narrowing of rural-urban value differences. As Rogers and Burge (1972:8) state:

Rural-urban differences in values are decreasing as the U.S. moves toward becoming a mass society. The many links between farm and nonfarm sectors of society result in an interchange of values between rural and urban people. The breakdown of isolation, once characteristic of rural life, aids the trend toward a mass society.

Certainly, second-home development has been the main rural-urban communication link

for many rural areas in the Northeast. However, the linking of rural and urban society does not necessarily mean that value differences will be eliminated.

Integration of urban-oriented vacation home families into a rural environment creates a situation where they must maintain ties between two locations. Although urban and rural people do not represent disparate cultures, differences are often great enough to result in a lack of positive communication. The urban family does not alter its previously attained and economic patterns during the seasonal occupancy of a vacation home. They have limited time to invest in developing a well functioning social community because they find it easier and probably more desirable to maintain membership in their urban-oriented society, which modern transportation and communication facilities make highly accessible (Ragatz 1969:16).

In fact, seasonal migration of urban residents into rural communities may be more a source of conflict than a means for bridging differences.

### *Changes in the Rural Community*

The process of second-home development is likely to bring about many changes in a rural community's social environment. Changes in public health, housing, and esthetics will have a direct effect on the life styles of permanent residents and may improve or degrade the quality of life in their community.

### **Public Health**

In rural areas, where populations are highly scattered and town budgets are typically strained, public health is largely a matter of individual responsibility. A community subject to rapid increases in population due to construction of second homes may find itself with public health problems and no adequate system for solving them.

Pollution of water supplies through inadequate sewage treatment is a major social prob-

lem as well as an environmental problem. State and local controls to prevent water pollution must be strictly enforced by local officials, but many local health boards do not have the time or knowledge to keep up with problems arising from rapid development.

Given sufficient local concern, water-pollution problems can be minimized. In Lee, Massachusetts, stringent local subdivision laws combined with active public concern forced a developer to avoid building on property within 600 feet of the lakeshore he owned. His profits suffered greatly, but the public benefits far outweighed this loss (Satterthwaite 1969).

Other health problems may arise because urban people are unfamiliar with the health hazards of rural environments. Ragatz (1969) suggests that this unfamiliarity could lead to high accident rates—especially in swimming and boating—vector-borne diseases, and consumption of poorly preserved or uninspected foods.

On the positive side, communities receiving substantial tax revenues from second homes may find it possible to finance adequate health clinics and attract doctors who find the rural lifestyle agreeable.

## **Housing**

As communities undergo second-home development, land prices and rents tend to rise. This may benefit landowners, but renters may be forced to move into lower quality housing or move to areas where property values are lower. Individuals planning to purchase real estate may find themselves priced out of the market. Even landowners may feel the squeeze of rising land values. As taxes rise to meet the cost of providing additional services for an expanded population, a landowner may find his income inadequate for making needed improvements on his property, or he may be forced into unwanted conversion of part or all of his property.

It might be argued that second homes provide a valuable addition to a community's housing stock, but such is not always the case. In the Northeast, in 1969, 88 percent of the

second homes had electricity, but only 57 percent had running water, inside toilet, and bath; and only 24 percent had central heating (U.S. Department of Commerce). Though recent trends have been toward construction of fully equipped, year-round second homes, it is unlikely that many local residents could afford them. Thus second homes attract new residents, but make no contribution to the housing needs of most permanent residents.

## **Esthetics**

It is difficult to identify the impact of second homes on the esthetic value of a community. Esthetic values are subjective and vary with an individual's cultural background, emotional state, and physical ability to sense the environment.

However, people have long marveled at the beauty of rural America. New England landscapes, for example, have been the subject of countless travel brochures, greeting cards, paintings, and novels, and have attracted generations of tourists. For many urban dwellers, rural America represents the essence of nature. Verdant fields, rolling hills, grazing cattle, and quaint villages are familiar images.

Paradoxically, many rural scenes are the result of the same force that created urban sprawl: human effort. In the Northeast, clearing land for crops and cattle and harvesting timber have shaped the rural countryside to its present form. The result has been a pleasant mix of open and forested terrain.

Second-home development poses a serious threat to these landscape qualities. If land is removed from farming, untended fields will revert to forest. Given fragmentation of parcel size, increased out-of-state ownership, and the disinterest of second-home owners in forest management, timber harvesting will be greatly curtailed. The resulting loss of open space will reduce the scenic quality of the rural landscape.

A partial solution to this problem is land-clearing. In Lamoille County, Vermont, for example, the Future Farmers of America chapter at People's Academy in Morrisville has purchased a brush-hog and tractor and rents

these to second-home owners who wish to keep back the invading forests that follow farm abandonment (Satterthwaite 1969).

Another solution is thoughtful design and layout of second-home developments. Single isolated units are not likely to have a significant visual impact. However, most developers favor multi-unit projects, which increase the likelihood of landscape incompatibilities. Design features such as clustering, minimal clearing, and the selection of materials that blend with surrounding vegetation can substantially reduce the visual impact of a development.

#### *Environmental Attitudes of Second-Home Owners*

The attitudes of second-home owners toward the environment can be a key factor in a community's ability to develop policies and implement plans to control development and maintain or enhance environmental quality. Wide differences between second-home owners and residents can create serious problems, especially in communities where planning resources are limited.

Two studies about environmental attitudes of second-home owners have been published. Six Vermont lakeshore communities were studied by Bevins (1972), who surveyed seasonal residents, town officers, and year-round residents. Respondents were first questioned about lake water quality, sewage, trash and garbage disposal, community attractiveness (layout), and the effects of increasing population. Second, attitudes were sought on local environment-quality issues, including attractive and objectionable conditions in the community, suggestions for improvement, and future development. Third, respondents were asked their opinions about various restrictive measures for assuring future environmental quality.

Results showed that second-home owners, year-round residents, and town officials of all six communities agreed on nearly all issues. The only area of disagreement was whether or not an upper limit should be placed on second-home development. Second-home owners placed a high priority on establishing an upper limit, whereas town officials felt that doing so

would place an undesirable limit on the tax base. In summary, Bevins (1972:26) noted that:

This similarity of attitudes between the three groups is important. If these attitudes are reflected at town meeting, voters will adopt legislation that is acceptable to most community residents, both seasonal and year-round.

Tobey (1972) studied attitudes of second-home owners in five Maine communities, but did not elicit responses from year-round residents or town officials. Most owners were satisfied with the quality of the local environment, and they perceived a positive relationship between environmental quality and the value of their property. Concerning restrictive measures to preserve environmental quality, Tobey (1972:27) observed:

Where restrictions or controls related to environmental quality are concerned, the typical seasonal resident is willing to subject individual freedom to some potential risk. He favors further muffling of outboard motors, restricted zones for water skiing, restricted areas for trail bikes and the like, and off-limit areas for automobiles. He finds agreeable the idea of a limit on the total number of seasonal homes in his community. He also favors restrictions on the use of both pesticides and household detergents. Thus he is not, contrary to popular impression, hostile to all forms of individual restriction aimed at improvement of the common environment.

Thus Tobey found second-home owners to be receptive to some restrictions likely to be favored by local residents and town officials, and his results support the conclusions reached by Bevins.

#### **Environmental Impacts**

The types of impacts on the natural environment from second-home development are not substantially different from the impacts of any sort of housing development and associated community growth. Such development affects ground and surface water, soil, vegeta-



tion, wildlife, and microclimates whether it is for seasonal or year-round use. However, there are some special characteristics of second-home developments that make their environmental impacts either more or less severe than those of other developments.

Many second homes are built in ecologically fragile places such as steep mountain slopes, stream banks, and ocean shores. In sensitive areas, water pollution and soil erosion may be much more difficult to avoid than in urban areas, which usually are on flat land with deep soils.

Most second homes are built in rural areas that lack sewage-treatment facilities and may lack adequate protective regulations to control environmental damage. And many second homes are built in wooded areas with a high potential for damage to trees and wildlife.

On the other hand, because second homes are built in rural areas, their environmental effects may not be as concentrated or as serious as those of similar developments at the expanding perimeters of metropolitan areas.

A trend toward condominiums in second-home developments was earlier noted as minimizing some environmental impacts of construction. Soil erosion and damage to vegetation should be less than that from detached housing units, assuming that overall population density is the same.

#### *Impacts on Ecological Succession*

Second homes may have major and irreversible effects on rural ecosystems by interfering with ecological succession. An ecosystem includes the set of interactions between organisms and their environment within some bounded area. Ecological succession is the orderly process of ecosystem change and development that tends toward a diversified and stable ecosystem (Odum 1969).

The impact that second-home development will have on the ecological succession of an area is determined by the ability of the ecosystem to maintain itself in the face of outside change, and by the intensity of second-home construction. Second-home development is looked upon by many as an extension of urban-

ization, starting with construction and seasonal occupation and ending with conversion into permanent structures. However, from an ecosystem perspective, it is construction, not conversion, that is the cause of conflict.

As the number of second homes in an area increases, natural biological processes are disrupted, the diversity of plant and animal species decreases, and the ecosystem becomes less able to maintain its stability through succession. If the process continues long enough, the end result will be a major commitment of land to urban uses, thus creating an irreversible situation in which ecological succession has been replaced by cultural intervention. Some specific examples of ecosystem disruption are soil erosion, water pollution, and changes in wildlife habitat.

#### *Impacts on Soil and Water Resources*

The invasion of second homes into the rural landscape can have a significant impact on the soil and water resources of a community. Soils left unprotected after removal of vegetation may be eroded, and silt will be deposited in streams and lakes. Housing on soils unsuited for septic systems will cause ground- and surface-water contamination.

A study of recreation subdivisions in the Masanutten-Blue Ridge area of Virginia (Shands and Woodson 1974:17) dealt with both problems:

This land has many natural limitations for any development. Expensive grading (or artificial terracing) is required for most building sites, and roads constructed are often impassable during and after periods of snow and rain. Commonly there is very little soil cover over the rock subsurface in such areas making on-site sewage disposal impractical. Yet the high cost of laying pipe in rock areas and for pumping stations makes sewage treatment plants also impractical. Severe building restrictions should be placed on all areas with slopes over 25 percent. Only very low density residential development should be permitted and even then with strict regulations so that all sanitary rules are met

and so that vegetative and ground cover is not lost, increasing erosion and stream pollution.

The potential for water pollution is extremely high in lakes where shoreline development has occurred. Typically, buildings are constructed very close to the shoreline. There the water table is high, and septic systems will not operate properly. The result can be extreme enrichment of lake water, explosive algal growth, and eventual lowering of dissolved oxygen content as algal and other plant material decays (Satterthwaite 1969:25).

A case study of the San Juan Islands off the coast of Washington gives further evidence of the high potential of second homes for increasing water pollution (Denney 1974). Shallow soils, low permeability, and a high water table severely impeded effective septic tank operation over most of the islands. Particularly affected were shoreline areas, where high second-home densities and insufficient drain fields posed a serious threat to marine life.

#### *Impacts on Wildlife Resources*

Although much is known about habitat requirements and management techniques for many wildlife species, little research has been directed toward the impact of development on wildlife. We do know that changes in the ecosystem resulting from human activity may be damaging to some wildlife species and beneficial to others. Compatibility between wildlife and second-home developments depends on the quality and magnitude of construction, the condition of the ecosystem before development, land stewardship after development, and the species of wildlife indigenous to the area.

Most game species are likely to be adversely affected by second-home development. Because of their greater home range requirements and habitat specialization, species such as deer, bear, pheasant, and duck are incompatible with most development. Their habitat is reduced when homes are built, resulting in a lower carrying capacity of the ecosystem for these species. Scattered second-home development and accompanying recreational activities such as trail-bike riding and snowmobiling pose

a serious threat to the future management of game species. Cluster developments and provision of open space can help minimize this impact.

Small game and nongame wildlife such as songbirds, raccoons, squirrels, skunks, and other small vertebrates are less likely to be adversely affected by second-home construction. In fact, with careful planning and construction practices, habitats can be significantly enhanced for some wildlife species. Selective thinning of forest stands, clearcutting for home-sites and roads, encouragement of old-field succession, creation of water impoundments, and planting of fruit-bearing trees and shrubs may accompany housing development and will benefit many wildlife species.

#### *Impacts on Coastal Areas*

The ocean shore is one of the most popular and one of the most difficult places to locate second homes.

Estimates are that 57 percent of the U.S. population will live in the 21 states on the continental coastlines by 1985. About 40 percent of U.S. factories are presently located in coastal counties.

A Department of the Interior survey shows that most of the nation's estuaries along the Atlantic and in Oregon, Washington, and California have been modified more or less severely by man's activities.

The shoreline available to the general public is shrinking fast. A U.S. government study indicates that 90 percent of this limited, highly desirable recreation resource is in private control, about 5 to 7 percent is in public recreation areas and about 3 percent is in restricted military areas (U.S. News and World Report 1970:44).

Ironically, the coastal zone is one of the most dynamic of all ecosystems, continually changed by the forces of tides, winds, and rains. Human effort to develop this zone has often failed. Such practices as dune stabilization, groin construction, and dredging and filling of tidal marshes and estuaries have resulted in flooding, beach erosion, loss of wild-

life habitat, and a degraded recreation landscape (Dolan, Godfrey, and Odum 1973). As development continues, these effects will increase. Coastline developments are long-term liabilities if frequent state and federal aid is required to repair damage (Gottschalk 1974).

Second-home developments along the shore are particularly subject to natural disasters. The experience of the New Jersey shore in March 1962 should serve as an example for all future coastal development (McHarg 1969). Wide-scale development and complete disregard for coastal processes resulted in nearly total destruction when violent storms battered the area. Thousands of beach houses were swept away, roads and utilities were destroyed, and devices aimed at controlling natural processes failed totally. Unless second-home developments along the shore are planned with careful attention to ecological changes that may occur there, they must be viewed as temporary.

## POLICY ISSUES

### Does Growth Pay?

Does growth that is stimulated by recreation demand and the construction of second homes provide net benefits to local communities? This question is a vital issue for rural communities throughout the United States. We tried to answer it for the town of Stowe, Vermont.

#### *Costs, Revenues, and the Tax Rate*

The following generalizations seem to apply:

- Total town budgets grew rapidly in most Vermont towns after 1950, and especially after 1960. Primary factors were rising standards of education and higher salaries for public employees, especially teachers.
- In ski-oriented towns, investment and increased land values raised the tax base rapidly after 1960. The rise was fast enough that tax rates declined even in the face of spiraling local government expenditures.

- Compared with other rural towns, the ski-oriented towns support a much higher per-capita level of public services on lower tax rates.
- Many ski towns derive large fractions of their tax revenue from owners of second homes drawn there by winter recreation opportunities. Many of these units are owned by out-of-state residents. Such units currently demand few local public services.
- Much recent second-home growth has been in condominium complexes. These units tend to have high average values and hence high tax payments. They have relatively low public service costs, compared with scattered development, and seem less likely to become permanent residences.
- Major facilities drawn to an area by ski recreation are significant employers and taxpayers. The Mt. Mansfield development, for example, pays more than \$100,000 per year in taxes to the Town of Stowe.

It is difficult to avoid the conclusion that many ski towns have benefited handsomely from winter recreation and associated second-home development. But this is not yet the whole story.

#### *Community Growth Cycles*

Economic growth affects a community in many complex ways. In rural New England, the typical rural farming community has little industry or commercial activity. Its government provides services in balance with its needs. Reflecting the concentration of population in villages, village governments provide village-oriented services, while towns serve the scattered farming population.

With the development of a ski area, several changes begin. Demand for land raises real estate values, increasing the town's tax base. Major capital investments in lifts, motels, and second homes boost the tax base still further. Rising commercial activity creates a burst of activity in new business and expanded sales of existing enterprises. In Ludlow, for example, in the 10 years from 1962 to 1972, the num-



bers of real estate firms quadrupled, restaurants doubled, building contractors tripled, and hotels and lodges increased sevenfold.

This growth is often so rapid that it endows the town with a tax base that rises faster than government costs. The rising investment in structures and the rising number of visitors require added services. But they do not greatly affect the largest budget item, the schools. The increased town budget is offset by higher average real estate values and by increased investment. During this phase, tax rates may actually fall, as they did in Stowe after 1960.

But it may not be long before the infrastructure that was adequate for rural life is outmoded. The growth in service population will require higher levels of services, and the provision of new services, such as full-time fire and police protection. In addition, structures will usually be scattered far beyond old village boundaries, raising unit service costs and making the old town-village government structure obsolete.

The next step is usually a conversion of some units to full-time residences. In the Ludlow study, prospective conversion rates between 22 percent and 60 percent were reported. The Ludlow results showed that second-home growth roughly pays its way in taxes if it places no new burden on the school system. That study did not present direct evidence of additions to school enrollment as a result of second-home conversion.

The prospective rate of conversion into residences is difficult to predict. It must suffice to point out the complexity of motives for owning second homes. For many owners, especially of the popular condominium units, the purchase is simply a financial investment. In many areas, low-cost condominium units have doubled in price in five years. Especially in times of depressed securities markets, experiences such as these must certainly draw speculative capital into second homes.

However, when a condominium is sold, it probably remains as a second home. In Stowe, where condominiums have accounted for 70 percent of new home construction since

1967, very few have been converted to full-time use, and the prospect is that few will be converted in the future. Some developers, sensitive to this issue, are requiring purchasers of units to agree not to establish full-time residence as long as their families include school-age children. In addition, condominium units in Stowe sell for very high prices: many above \$70,000. Such units can yield a tax payment to the town under current assessments and tax rates that will easily offset the per-pupil costs of one child.

Other purchasers may be buying second homes for eventual retirement. In that case, school costs will not be affected by conversion to full-time residence. And when retirees die, it seems probable that reconversion to second-home use will occur as children inherit the property, or as units are sold to new owners.

Given the high prices of most second homes now being built, few persons purchase them with the intention of moving to a town to earn a living. A fortunate few apparently work elsewhere and commute from homes in ski towns, but these are very few indeed.

For the preceding reasons, it is difficult to make simple generalizations about the effect of second-home development on local town finances. Specific effects will depend upon the state of the public service infrastructure, the rate of economic expansion generated by recreation facilities, the types of units added to the second home inventory, and the prices of those units. Results from Ludlow or Stowe cannot be directly applied to other areas. It also seems unlikely that the methods of several well-known studies of suburban developments could be applied for forecasting purposes in rural recreation towns (Muller and Dawson 1972; Mace and Wicker 1968). Such methods, however, could be used to explore the implications of alternative developments for an area.

### *Beyond the Property Tax*

Many planners, politicians, developers, and analysts have viewed the benefits of growth exclusively from a local viewpoint. This is the issue foremost in the minds of local zoning boards and school boards. But a host of addi-

tional higher-order effects become relevant, once one looks beyond the property tax.

First, second homes and associated recreation facilities generate additional supporting investment in restaurants, stores, and service establishments. These activities produce property tax revenue. In analyzing costs and revenues, these induced investments are often not considered.

In some states, state school financing systems include formulas for supplying extra funds to localities with low per-capita taxable wealth. Under such systems, rapid increases in the tax base can lead to declines in state school aid. This is not an economic cost of growth, but a purely financial one. It is usually small in relation to the total school budget.

In addition, the spending generated by recreational developments yields tax revenues to higher levels of government: state and federal income, sales, and capital gains taxes, for example. From a national standpoint, these sums may simply be transfers from one region to another—dollars spent on a Vermont winter instead of on a Maine summer. But from a state viewpoint, much second-home revenue is a net gain because it results from spending by nonresidents.

### *Beyond Dollars*

The above considerations suggest that the public policy challenges posed by growth are not restricted to finance and tax policy. They include other costs and benefits related to growth.

Many rural towns, especially in areas where farming is in decline, hope to grow in a way that will provide a solid economic base for local employment. Such a base will permit the community to survive at a reasonable living standard and to supply an appropriate level of education and other public services. Recreational development does supply jobs and incomes. But it is probably less desirable as a community economic base than manufacturing, which is less seasonal, pays higher wages, and may be less vulnerable to changing weather and fuel supplies. Decades of history suggest, however, that small rural towns in northern

New England are not competitive locations for most manufacturing.

Recreational development as a growth option must also be appraised for its social effects. Ski and second-home developments create an economy heavily dependent on behavior of nonresident owners, where a mobile, low-wage work force serves an equally mobile but relatively affluent group of short-time visitors. The effects of rising land prices and taxes associated with recreation development may also eliminate local farming and forestry. A way of life built on the land and its products may disappear, often in less than a generation (Forster 1964).

The question, "Does growth pay?" has meaning only in relation to a decisionmaker's goals. A community which gains a tremendous tax bonanza from second-home development may later conclude that growth doesn't pay, if it costs the town a treasured way of life.

### **Second Homes and Land Use**

Speculative buying of rural land for second-home development has been blamed for the decline of agriculture and forestry in some regions, including the Northeast.

In addition to their value for products, farming and forestry are ecologically beneficial land uses. They protect a landscape that is not only valuable, but a necessary capital investment by society (Odum 1969). The continuation of such an investment depends partly on the regulatory mechanisms that control the transfer of protection land to other desirable uses.

The classical pattern of second-home development is for the developer to buy land from farmers who are having difficulty paying increasing property taxes. Age and health of the owner, diseconomies of small size, labor problems, availability of nonfarm employment, and the prospect of capital gains create additional pressure to sell land (Sinclair 1969). The farmer may sell eagerly and be thankful for a chance to retire, or he may feel forced out of business. In either case his land is taken out



of production for farm and forest products, and it may be diverted from its protective role.

#### *Effects of Taxes on Land Use*

It is difficult to distinguish between the effects of higher land prices and higher property taxes on land use. Higher farm land prices increase the capital charges against a going concern, or render it impossible to transfer land to other farm users. They also provide the owner with the motivation and opportunity to leave farming. Higher property taxes represent an increased charge against current cash income. But these charges in relation to total real estate value may not rise significantly. Whether or not property taxes rise in relation to market value depends upon whether assessments keep up with increased land prices. A rising tax rate, with falling effective assessment ratios, could yield a stable effective tax per dollar of market value. By the same token, a falling tax rate, such as experienced in Stowe, could still result in rising effective tax rates if assessments rise.

Sinclair (1969) examined the property tax as a cost affecting farmers in Vermont. He concluded that it was a minor factor in the decision to leave farming, compared to rising prices and other factors.

In New Hampshire, Jewett and Wallace (1967) examined effects of property taxes on the financial feasibility of forestry in 38 sample towns. They concluded (1967:9):

... most towns are not taxing white pine, hardwood, or spruce-fir land at a level which is burdensome under managed conditions and at the present price levels for stumpage.

They noted, however, that in half of the southern New Hampshire towns, tax levels were a cause for concern. Their data indicated that forest land taxes contributed only 3 or 4 percent of town tax revenue.

Considering other factors such as fragmentation of parcel size, and increased out-of-state ownership, which accompany recreational development, rising taxes are probably not a major cause of reduced timber growing in the Northeast.

#### *Effects of Rising Land Prices*

Rising land prices have provoked controversy in many states. Their actual effects, however, are difficult to analyze. In Vermont, it is clear that spiraling land prices are caused primarily by rising demand for vacation homesites and absentee land ownership. Speculation engendered by this trend is no doubt a contributing factor.

The rising disparity between net farm incomes and the market price of farmland in Vermont makes it more and more difficult for farm operators to purchase land for farming or add to their holdings to create more efficient land units. Clawson (1972) has identified the land-price problem as a number-one issue in the economic future of American agriculture.

In addition, frequent complaints have been heard about the effect of rising rural land prices on the economic feasibility of forest management. In many areas of the country, forest land prices are now far above levels that can be justified on the basis of wood production alone. Finally, rising land prices have slowed many public purchases of land for recreation (USDI Bureau of Outdoor Recreation 1967).

Rising land prices may or may not promote more efficient land use. They may motivate efficient clustering or multiunit development, but may also promote uneconomic and unesthetic scattering.

#### *Combined Effects*

In the Northeast, second-home development has resulted in subdivision of substantial areas of rural land. In addition, further areas of land are being assembled or purchased for future subdivision or development. Farms may be kept in operation pending subdivision by their promoter-owners, but forests are probably effectively removed from wood-growing or harvesting at this point.

Land prices and taxes have risen spectacularly in some areas. Evidence presented elsewhere in this report shows that in ski towns, falling milage rates buffer the effect of rising land prices on effective tax rates. But taxes per acre must still rise. These price and tax

trends clearly affect the welfare of resident land-owners, and of persons renting land or real estate. But their effect on land use *per se* is far from clear.

The following hypothesis seems reasonable in light of the above considerations. *Land-use changes in rural areas subjected to rapid recreation-oriented growth result primarily from the effects of rising land prices; Taxes play a secondary role.* This is because farming and forestry are residual land uses, which will tend to continue in the face of rising taxes, since the land has no alternative uses. Rising land prices, however, provide the pressure and the opportunity to sell land for subdivision or development.

### **Second Homes and Public Lands**

A problem deserving serious attention is the development of second homes and second-home communities near Federal lands. A study of land-price escalation concluded that future purchases of land for national forests, parks, wilderness areas, wildlife refuges, and recreation areas will be greatly curtailed unless the appropriate Federal agencies can find adequate approaches to financing such purchases (USDI Bureau of Outdoor Recreation 1967). As unregulated second-home development continues, the possibility of expanding public land holdings is significantly reduced. As one Forest Service district ranger commented about recreational subdivisions and forest acquisition in Virginia:

Land values are soaring because of speculation and [recreation subdivision] development. It has become increasingly more difficult to purchase lands planned for recreation because of high prices and quick sales to developers. Inholdings are being purchased for subdivisions—nearly all inholdings, whether suitable or unsuitable for development, are being purchased or looked at for possible subdivisions. Most of these tracts were planned for National Forest acquisition but it is nearly impossible to compete with developers. Many inholdings are

key tracts that, if subdivided, change the whole character of the surrounding land for most forest uses (Shands and Woodson 1974:25).

As development projects near Federal lands get bigger, more people will have direct access to these lands for a major portion of the year. Seasonal residents near Federal lands may monopolize recreation sites and facilities to the exclusion of those who travel from farther away. For example, the developers of Bretton Woods, bordering the White Mountain National Forest in New Hampshire, are planning a \$100 million investment to be spread over 10,000 acres and 50 years. They expect an eventual seasonal population of 22,000. The New Hampshire Office of Comprehensive Planning estimates a population of 40,000, with many becoming permanent residents (Redlich 1973). Such a development is likely to crowd the forest and cause increased management costs for the Forest Service. Possible timber operations within sight or hearing of the development will likely meet unfavorable reactions from the residents.

### **POLICY RESPONSES**

Although many of the economic, social, and environmental problems of growth in rural areas have long been recognized, effective policy responses are still much needed. Growth trends that promised progress to many rural towns were seen later to generate undesirable effects. Rural local governments have usually been completely unprepared to anticipate and cope with the challenges posed by growth. Observers have found this to be true from Washington to Florida (Denney 1974; Bird 1972; Shands and Woodson 1974). From 1968 data, the U.S. Department of Agriculture (1973) estimated that, of the New England townships outside of urban areas, only 43 percent had planning boards, only 27 percent had zoning ordinances, and only 25 percent had subdivision regulations. States and the Federal Government also must develop policies to deal with problems associated with growth, land use change, and second-home developments.

The following are some policy responses that have been suggested or attempted.

### **Public Service Costs**

#### *Issue*

Second-home development represents the urbanization of rural areas, and it raises the cost to local governments of providing public services. Existing services such as schools and fire protection are required on a larger scale. And new services, such as building inspection, sanitary inspection, and sewers may be required. New residents may also desire improved schools, libraries, and health services.

#### *Responses*

Overall planning can encourage development patterns that can minimize costs of providing public services. Subdivision regulations and platting requirements can be used to assure the maintenance and quality of roads and other structures that may be dedicated to municipal control. Local planning efforts should make use of existing state laws and guidelines by incorporating them into town plans. This can add effectiveness by eliminating duplication and ensuring coordination between state and local agencies.

Some public service costs can be "internalized" by requiring developers to construct the needed facilities and pass the cost on to purchasers. This practice has been used with sewage-treatment plants constructed at some large condominium complexes. In large tract developments, builders have even constructed schools and dedicated them to the municipality, but few rural subdivisions or developments are large enough to justify this practice.

### **Equity Effects of Rising Land Prices and Taxes**

#### *Issue*

Development brings higher land prices. Taxes per acre or per dwelling unit usually rise. Landowners benefit from rising prices, and wealthy landowners benefit especially from capital-gains tax treatment of income from land sales. Rising taxes do little harm to most landowners, but both rising taxes and rising prices

hurt renters and small resident landowners. Low-income families and those on fixed incomes may be priced out of the housing market or even forced to move.

#### *Responses*

Effects of growth on low-income families can be mitigated in several ways. First, planning can provide for maintenance and for low-cost housing as well as \$100,000 condominiums. Some states use special tax assessments or exemptions for the elderly or other specific groups. Other states, including Vermont, have instituted "circuit-breakers," which automatically adjust property taxes when they absorb more than a specified percentage of income (Advisory Commission on Intergovernmental Relations 1973).

To compensate the State for the \$10 million loss likely to occur under this law, a capital gains tax on Vermont land sales was also adopted. Under the capital-gains law, a 60-percent tax is paid by persons who make more than 200 percent profit on land held less than 1 year. Other tax rates depend on the amount of profit and length of ownership, diminishing to no tax on land sold after it has been held for 6 years. Though the Vermont example may not be applicable elsewhere, other states can use it to explore alternative approaches to the problem.

### **Effects of Rising Prices and Taxes on Land Use**

#### *Issue*

Rising taxes and land prices may threaten the financial viability of traditional rural land uses such as farming and forestry. These activities furnish employment, provide local sources of food and materials, and maintain land as open space. In addition, they form a part of the region's rural lifestyle, which may be important to current residents and to visitors as well.

#### *Responses*

Past efforts to control the sale and development of agricultural lands have been generally unsuccessful. Zoning, probably the most widely accepted form of land-use con-



trol, has failed because restrictions are too easily lifted in exchange for short-term economic and political gains. Minimum lot-size requirements are ineffective when pressure to develop is intense and when rising assessments and prices make farming uneconomical (Isberg 1973).

Tax-deferral laws, although somewhat effective, have not completely prevented the development of agricultural lands. Such laws typically allow for land to be taxed at its value for agriculture instead of its market value, and they require the owner to pay the taxes and interest that have accrued during the deferral period when the land is eventually sold or transferred to nonagricultural uses. Actually, speculative land owners have been able to use such laws to their advantage by waiting until land values are high enough to more than compensate for the back taxes they must pay. In turn, developers who buy land simply pass the added cost on to the consumer.

New Jersey has recently adopted the concept of purchased development rights in an effort to reduce further urbanization. Under this plan, the state purchases the right to develop land, but leaves the land in agriculture. Because the taxable value of the land is reduced, the farmer's property tax is reduced. In addition, the farmer receives the cash difference between the value of the land's agricultural productive capacity and its market value as payment for selling development rights to the State (Gralla 1975).

Tax burdens on forest lands may be eased by special assessment programs available in many states. Such programs usually provide for low current tax payments and for large severance taxes at the time of timber removal. They require that the land be managed under plans approved by state foresters.

### **Federal Responses to Land-Use Issues**

#### *Issue*

Second-home development raises land-use issues common to many parts of the country.

Although responsibility for land-use regulation rests primarily with state and local governments, Federal legislation could provide guidelines or financial assistance in carrying out these responsibilities.

#### *Responses*

To date, Congress has helped indirectly to regulate second-home development by creating the Office of Interstate Land Sales under Title XIV of the Housing and Urban Development Act of 1968. This office was created because of recognized Federal interest in controlling interstate commerce (in this case to prevent consumer fraud), but it in no way regulates the quality or quantity of second-home developments. Although the law requires developers to file information about the physical, financial, and legal details of certain projects (50 or more lots of less than 5 acres each), the Office has limited enforcement power. It may issue a "notice of suspension" to a developer on grounds of "incomplete or inaccurate" information (Sec. 1710.45), but it may take no action if the information filed is true and complete, no matter how damaging the development may be to the environment (Platt 1973).

Congress has passed legislation to protect air and water resources, but no legislation has dealt comprehensively with land use. Senator Gaylord Nelson, co-author of the recent land-use bill (S. 268) rejected by the House of Representatives (H.R. 10294) has said:

There is one land use practice that is of such pressing national concern that speedy action by the most appropriate governmental level must be begun immediately if we are to avoid a resource tragedy of unprecedented proportions. I am speaking of the explosion of massive real estate developments for second homes or year-round living outside the Nation's cities and suburbs. This is epidemic of land development that is threatening nearly every remaining scenic area in this country (Healy 1974:368).

## **Environmental Problems**

### *Issue*

Specific environmental problems from second-home development include water pollution, soil erosion, loss of sensitive or important plant communities, and loss of wildlife species. Water resource losses are particularly important because water is needed for consumption, waste disposal, and recreation.

### *Responses*

Water pollution from septic systems can be reduced by sanitary regulations that prevent the use of unsuitable soils for leaching fields and require sewers and treatment facilities for large second-home complexes. Erosion during and after construction can be controlled by restrictions on construction practices and site design. For example, Vermont, New Hampshire, and Maine have instituted various permit processes designed to protect their state waters.

Town master plans can be made to identify floodplains, wetlands, sensitive plant communities, and important wildlife habitats. Such areas can then be protected through floodplain regulations under the federally-mandated flood-insurance program. In addition, some states have programs for regulating the use of wetlands. Programs designed for preservation of open-space should give priority attention to such areas.

## **Visual and Esthetic Impacts**

### *Issue*

Most rural areas affected by second-home development possess scenic qualities that are the major attraction for both second-home buyers and short-term visitors. Some areas have already reached the point where unplanned sprawl is reducing the scenic amenity that was the original attraction. Some areas, however, are beginning to realize that their most important economic asset is their scenery.

### *Responses*

Visual amenity can be protected through a variety of devices. Controls over signs and roadside structures can improve the visual quality of existing and prospective develop-

ment. Sound planning can guide development away from significant scenic corridors and overlooks, and prevent unsightly and unsafe strip development along major roads.

Protected open space will be a major ingredient of an active program for amenity preservation. Open land can be preserved through use of purchased or donated easements, development rights, or fee simple titles. In some areas, experiments with floating development rights are under way. With the rise of the large-scale land development, some municipalities have begun using mandatory dedication requirements to assure that each subdivision or development makes some contribution to needed open space. Finally, tax laws and other measures can be used to help maintain the financial viability of farm and forest-land owners and help them preserve the esthetic values of their land.

## **Social Changes**

### *Issue*

This study suggests that adverse social changes and reductions in quality of life are probably more important effects of second-home development than are strictly financial or economic effects. Significant social changes include:

- Loss of rural occupations and lifestyles as land prices rise and new employment opportunities change the area's economic base.
- Low incomes and seasonal employment in tourist-related service industries. Many jobs generated in this sector will be filled by nonresidents or transitory workers who may not take part in town government and local institutions.
- Homes and property become increasingly controlled by nonresidents. Decisions affecting the area's welfare are made increasingly by outsiders.
- Important positive effects can occur as well. Quality housing, scenic amenity, and recreational opportunities may bring in persons with important professional skills who can serve community needs. Such

persons may also lend expertise to the conduct of local government, which is often largely in the hands of unpaid non-professional citizen committees.

### *Responses*

While policies discussed above can affect the social changes noted here, suggestions for solving social problems unfortunately are beyond the scope of this study.

## CURRENT STUDIES

Sixteen studies on second-home recreation are now under way. Many of them deal with impacts: economic, social, and environmental. Some deal with demand, consumer characteristics and attitudes, and marketing strategies. One deals partly with policy responses by government, and another deals with constraints of transportation on second-home use.

Additional research will no doubt be undertaken. Certainly more is needed. The growth of the second-home market seems destined to continue, with increasing impacts on people and their environments. A brief list of the research underway follows:

1. Impact of recreational development on semiprimitive land. This study, part of the National Science Foundation Research Applied to National Needs (RANN) Program, is being made in Gallatin County, Montana. It focuses on the economic-ecological impacts of recreational developments, including changing land values, air and water quality, flora, and fauna. The study is being carried on by the Center for Interdisciplinary Studies, Montana State University, Bozeman, under the direction of Dr. James Jezeski. Two years of research have been completed, and the project has about 6 months to go. A preliminary report is available on request.
2. A study of lake-oriented residents in northern Michigan. This study is also supported by the National Science Foundation RANN Program. It will describe the characteristics, attitudes, expectations, and behavior of permanent and seasonal

residents of lake communities in Emmet and Cheboygan Counties in Michigan.

The study director is Robert Marans at the Survey Research Center, University of Michigan in Ann Arbor. The final report is due in September 1975.

3. Economic analysis of environmental quality effects associated with seasonal homes. This study in Maine, Vermont, Delaware, New Jersey, and Pennsylvania includes a questionnaire to measure individual attitudes toward local environmental quality. The study, project NE-65, is being conducted by the Northeast Regional Research Committee under the chairmanship of Hays B. Gamble at the Pennsylvania State University. The study began in 1968; the Maine and Vermont portions have been completed; and a joint publication for all 5 states is planned for 1975.
4. National vacation-home study. This study includes a national market survey to identify factors affecting supply and demand for second homes. It will also describe economic, social, and environmental impacts of recreation land developments, and it will list responses of local, State, and Federal governments to these impacts. The study, sponsored by the Council on Environmental Quality, is being conducted by the American Society of Planning Officials, under the direction of David Mossena in Chicago, Illinois. Publication is expected in 1975.
5. Recreation land development by large firms. This study focuses on consumer attitudes toward second homes built by about a dozen of the largest firms in the market. It also includes impacts of second homes on the physical environment in Pennsylvania, Florida, California, and the Southwest. The study is being carried on by the Center for Policy Research at Columbia University, under the direction of Beryl Kuder. Research began in October 1973, and it is nearly completed.



6. Land use and recreation land development in California. The size of the market for second homes in California and the effects of development size on demand are being studied using 1973 data.

The study is being done by Stephan Hall and George Ross in the Center for Real Estate and Urban Economics at the University of California, Berkeley. The study is expected to be completed in 1975.

7. Ten studies of second homes in the Southwest have been funded by the Forest Service, USDA, through the Eisenhower Consortium for Western Environmental Forestry Research.

At Arizona State University, B. A. Segall is studying the effect of second homes and related vacation developments on the quality of Arizona streams and ground-water.

At Colorado State University, three studies are underway. R. B. Held is investigating the environmental, economic, and social effects of urbanization of mountain watersheds. R. G. Walsh is investigating the economic implications of second-home developments in selected areas of Colorado. And H. W. Steinhoff is investigating esthetic perceptions of wildfire fuels near second-home developments.

Three studies are underway at the University of New Mexico. Environmental costs and socio-economic benefits of second-home developments are being studied by P. Montague. The impact of transportation constraints on second-home usage in Rocky Mountain areas is being studied by Bruce Buchanan and R. S. Freiburg. And J. R. Gosz is making a quantitative evaluation of disturbances associated with ski-area development.

At New Mexico State University, J. H. Bock is studying the impact of road routing and geometry on a forest environment in a second-home development.

T. A. Hoff and T. C. Shahan at Northern Arizona University are studying the local

socio-economic effects of new subdivision development areas of Arizona.

At Texas Tech University, K. B. Young is studying the costs and effectiveness of selected, alternative second-home waste disposal systems for their applicability to West Texas conditions.

## RESEARCH NEEDS

In the area of economic impacts of second-home development, studies are needed to determine the rate of conversion of second homes into year-round dwellings. The results would help predict the extent to which second homes will help meet housing needs, and they will help predict demand for local public services, including schools. Further studies are also needed to determine the full economic impact of second-home developments, including *effective* tax rates and costs and revenues at all government levels. Most studies to date have stopped short of this. Finally, alternative strategies for limiting growth should be examined in terms of their implications for local communities, for states, and for regions.

Research is needed on the effects of second-home development on extensive land uses such as farming and forestry. The effectiveness of land-use taxation in preventing land-use change should be examined, now that several states have enacted such tax provisions. Alternative means of preventing second-home developments from adversely affecting nearby public lands should be sought. These may include the creation of buffer zones, the elimination of private inholdings, or regulations on entrance to public lands. Research is also needed to determine politically acceptable methods of land-use regulation.

Information is needed on the distribution of the tax burden following second-home development. Comparisons among local, State, and Federal taxpayers, between in-state and out-of-state residents, and among residential, agricultural, forest, and commercial property owners should be made to determine who pays the costs of development.

Research on social effects is needed to help avoid conflicts between rural residents and urban visitors. Particularly helpful would be comparative studies on the attitudes of second-home owners and year-round residents on local environmental quality, desirable rates of growth, and public service needs. Do the two groups share the same perceptions, or do they differ radically?

Further research is needed on methods of alleviating environmental damage from second-home construction. Are there better construction techniques that would reduce soil erosion, better ways to dispose of waste products, better techniques for maintaining wildlife diversity or preventing damage to native vegetation? How can such techniques be implemented?

Finally, research is needed to predict the amount, quality, and location of future second-home development. Demand and marketing studies can help provide this information. Specific attention must be paid to the effects of continued shortages of energy and potential limitations imposed by higher costs of automobile transportation. Also important are effects of cyclical economic fluctuations: what effect will inflation or recession have on the amount, quality, and location of second homes?

Some of these questions can best be answered by commercially funded research, some by foundations, and others by government agencies. Each agency or organization will set its own priorities on the research that it funds. Consequently, no attempt is made here to suggest which of these studies is most important.

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Table 1.—Second-home and rural population of nine Northeastern States

State	Resident rural population	Second-home population	Total rural population	Second-home population as percent of total
	Thousands	Thousands	Thousands	Percent
Maine . . . . .	488	221	709	31
New Hampshire . .	322	132	454	29
Vermont . . . . .	301	72	373	19
Massachusetts . . .	879	155	1,034	15
Connecticut . . . .	122	30	152	20
Rhode Island . . . .	687	46	733	6
New York . . . . .	2,634	543	3,177	17
New Jersey . . . . .	795	183	978	19
Pennsylvania . . . .	3,363	278	3,641	8
Average . . . . .	..	..	..	15

Source: Ragatz (1974:92, 362).





